Journal of Graph Theory

Contents of Volume 14, 1990

Number 1, March 1990

Almost Every Graph has Reconstruction Number Three
B. Bollobás 1

Repeated Edges in 2-Factorizations
C. J. Colbourn and A. Rosa 5

New Upper Bounds for the Greatest Number of Proper Colorings of a (V, E)-Graph
F. Lazebnik 25

Hamiltonian Cycles in Planar Triangulations with No Separating Triangles
M. B. Dillencourt 31

On the Maximum Number of Pairwise Compatible Euler Cycles
H. Fleischner, A. J. W. Hilton, and B. Jackson 51

Regular Graphs with Prescribed Chromatic Number
L. Caccetta and N. J. Pullman 65

On the Linear Vertex-Arboricity of a Planar Graph
K. S. Poh 73

Reduced Graphs of Diameter Two
H.-J. Lai 77

The Chromaticity of Complete Bipartite Graphs with at Most One Edge Deleted
C. P. Teo and K. M. Koh 89

Maximal Chromatic Polynomials of Connected Planar Graphs
I. Tomescu 101

Circuits in Cayley Digraphs of Finite Abelian Groups
A. M. Wilkinson 111

Bounds for the Vertex Linear Arboricity
M. Matsumoto 117

Cycles Containing Matchings and Pairwise Compatible Euler Tours
B. Jackson and N. C. Wormald 127

Information for Contributors 139

Number 2, June 1990

Regular Graphs Having the Same Path Layer Matrix
A. A. Dobrynin 141

The Ally-Reconstruction Number of a Tree with Five or More Vertices Is Three
W. Myrvold 149

Maximal Matchings in Graphs with Large Neighborhoods of Independent Vertices
I. Rinsma, C. H. C. Little, and D. R. Woodall 167

The Edge Reconstruction of Hamiltonian Graphs
L. Pyber 173

A Note on Bipartite Subgraphs of Triangle-Free Regular Graphs
S. C. Locke 181

The Size of Strength-Maximal Graphs
H.-J. Lai 187

On the Parity of Planar Covers
D. Archdeacon and R. B. Richter 199

Hamiltonian Properties of Domination-Critical Graphs
E. Wojcicka 205

The Phrase Transition in the Evolution of Random Digraphs
T. Łuczak 217

Class 1 Conditions Depending on the Minimum Degree and the Number of Vertices of Maximum Degree
T. Niessen and L. Volkmann 225

Graphs with Homeomorphically Irreducible Spanning Trees
M. O. Albertson, D. M. Berman, J. P. Hutchinson, and C. Thomassen **247**

Perfect Path Double Covers of Graphs
J. A. Bondy **259**

Information for Contributors **273**

Number 3, July 1990

Arithmetic Graphs
B. D. Acharya and S. M. Hegde **275**

Embeddings of Cartesian Products of Nearly Bipartite Graphs
B. Mohar, T. Pisanski, and A. T. White **301**

Trees That Admit 3-to-1 Maps onto the Circle
J. Heath and A. J. W. Hilton **311**

Hamiltonian Circuits in N_2-Locally Connected $K_{1,3}$-Free Graphs
Z. Ryjacek **321**

A Note on K_i-Perfect Graphs
J. I. Brown, D. G. Corneil, and A. R. Mahjoub **333**

Certain Graph Invariants Do Not Distinguish All Graphs
D. A. Chalcraft **341**

Hamilton Cycles and Closed Trails in Iterated Line Graphs
P. A. Catlin, Iqbalunnisa, T. N. Janakiraman, and N. Srinivasan **347**

The Distance Spectrum of a Tree
R. Merris **365**

Locally Semicomplete Digraphs: A Generalization of Tournaments
J. Bang-Jensen **371**

Diameters of Iterated Clique Graphs of Chordal Graphs
B.-L. Chen and K.-W. Lih **391**

Information for Contributors **397**

Number 4, September 1990

Vertex Signatures and Edge-4-Colorings of 4-Regular Plane Graphs
F. Jaeger and G. Koester 399

On the Decomposition of n-Cubes into Isomorphic Trees
J. F. Fink 405

More Characterizations of Triangulated Graphs
C. Benzaken, Y. Crama, P. Duchet, P. L. Hammer, and F. Maffray 413

Automorphism Groups of Pictures
G. Behrendt 423

Induced Subgraphs and Well-Quasi-Ordering
P. Damaschke 427

On Irredundant Ramsey Numbers for Graphs
J. H. Hattingh 437

Universal Graphs and Induced-Universal Graphs
F. R. K. Chung 443

A Characterization of Graphs Without Long Induced Paths
G. Bacsó and Z. Tuza 455

Removable Edges in 3-Connected Graphs
D. A. Holton, B. Jackson, A. Saito, and N. C. Wormald 465

3-Edge-Connected Embeddings Have Few Singular Edges
E. A. Bender and L. B. Richmond 475

A Note on the Star Chromatic Number
J. A. Bondy and P. Hell 479

Generalized Exponents of Primitive Directed Graphs
R. A. Brualdi and B. Liu 483

One Sufficient Condition for Hamiltonian Graphs
G. Chen 501

Trees with Very Few Eigenvalues
R. A. Beezer 509

Information for Contributors 519

Number 5, November 1990

A Counterexample to Seymour's Self-Minor Conjecture
B. Oporowski **521**

Size and Independence in Triangle-Free Graphs with Maximum Degree Three
K. F. Jones **525**

Minimum Cycle Coverings and Integer Flows
C.-Q. Zhang **537**

Extremal Cover Times for Random Walks on Trees
G. Brightwell and P. Winkler **547**

Which Line-Graphs Are Perfectly Orderable?
V. Chvátal **555**

Cataloging Graphs by Generating Them Uniformly at Random
A. Kerber, R. Laue, R. Hager, and W. Weber **559**

Extending an Edge-Coloring
O. Marcotte and P. D. Seymour **565**

Coloring the Edges of $K_m \times K_m$
K. Heinrich **575**

Steiner Centers in Graphs
O. R. Oellermann and S. Tian **585**

Extremal Subgraphs of Random Graphs
L. Babai, M. Simonovits, and J. Spencer **599**

Graphs with the Balas-Uhry Property
M. Kano and S. Poljak **623**

Information for Contributors **629**

Number 6, December 1990

On the Bipartite Density of Regular Graphs with Large Girth
O. Zýka **631**

Covering Contractible Edges in 3-Connected Graphs. I: Covers of Size Three Are Cutsets
A. Saito **635**

Perfect Path Double Covers in Every Simple Graph
H. Li **645**

Ramsey Graphs Cannot Be Defined by Real Polynomials
N. Alon **651**

Hamiltonian Tournaments with the Least Number of 3-Cycles
M. Burzio and D. C. Demaria **663**

Balanced Graphs with Edge Density Constraints
J. Sheehan **673**

Dense Bipartite Digraphs
M. A. Fiol and J. L. A. Yebra **687**

Diagonal 11-Coloring of Plane Triangulations
O. V. Borodin **701**

Trees and Unicyclic Graphs with Hamiltonian Path Graphs
X. Yu **705**

Path-Isomorphic Networks
D. Hartvigsen **709**

Lower Bounds for Lower Ramsey Numbers
R. Faudree, R. J. Gould, M. S. Jacobson, and L. Lesniak **723**

Information for Contributors **731**

Volume Contents **733**